

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 11 AND NORTH POINTE DRIVE IN WASHINGTON COUNTY. US 11 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULLY-ACTUATED MODE WITH EXCLUSIVE-PERMISSIVE LEFT TURN PHASES FOR NORTHBOUND AND SOUTHBOUND US 11. THIS INTERSECTION WILL BE INTERCONNECTED TO THE EXISTING TRAFFIC SIGNAL AT US 11 AND MAUGANS AVENUE.

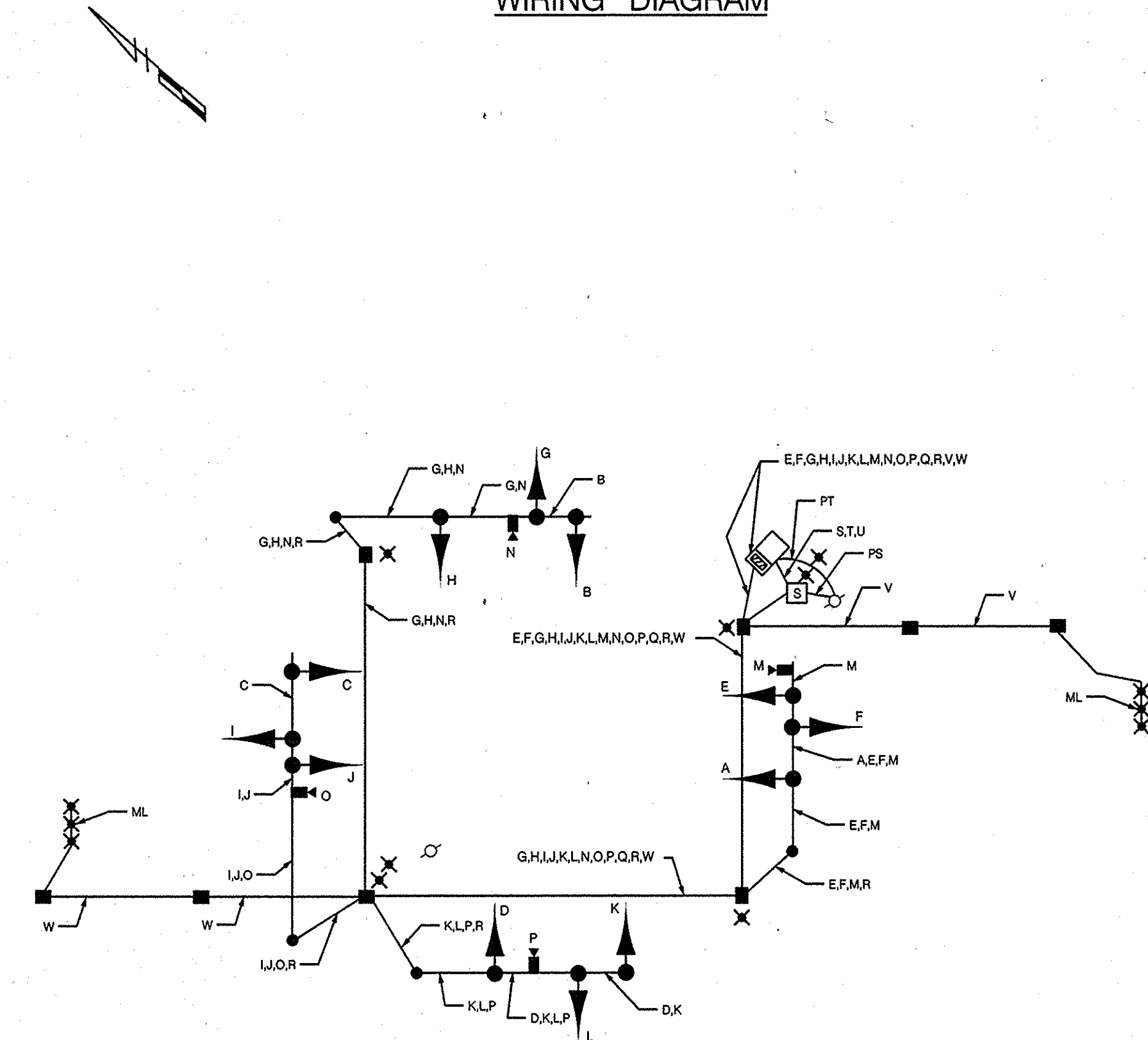
CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE AND VIDEO DETECTION INTERFACE EQUIPMENT HOUSED IN A NEMA "6" BASE MOUNTED CABINET.

SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF THE MSHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR MUST PROVIDE MR. SNYDER WITH THE NEAREST ADDRESS, ZIP CODE, AND PHONE NUMBER.

WIRING DIAGRAM



WIRING KEY

A-D	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E-L	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
M-P	VIDEO DETECTION CABLE
Q	12-PAIR VOICE GRADE INTERCONNECT CABLE
R	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
S-U	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
V-W	MICRO-LOOP PROBE LEAD-IN
PS	PROPOSED ELECTRIC SERVICE
X	GROUND ROD
ML	MICRO-LOOP PROBE
PT	PROPOSED TELEPHONE DROP

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

QUANTITY	DESCRIPTION
LS	MAINTENANCE OF TRAFFIC
5 CY	TEST PIT EXCAVATION
2 EA	FURNISH AND INSTALL HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING ARROW
130 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
300 LF	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
100 LF	FURNISH AND INSTALL 5 IN. YELLOW HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
1400 LF	FURNISH AND INSTALL 5 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
4 EA	FURNISH AND INSTALL 250 FT. VIDEO DETECTION CABLE
2 EA	CUT, CLEAN, AND CAP TRAFFIC SIGNAL STRUCTURE
32 EA	FURNISH AND INSTALL 12 IN. L.E.D. VEHICULAR SIGNAL HEAD SECTION
12 EA	FURNISH AND INSTALL 8 IN. L.E.D. VEHICULAR SIGNAL HEAD SECTION
2 EA	FURNISH AND INSTALL 16.5 FT. MAST ARM POLE AND 38 FT. MAST ARM (15 FT. "T" DIMENSION)
1 EA	FURNISH AND INSTALL 16.5 FT. MAST ARM POLE AND 60 FT. MAST ARM (15 FT. "T" DIMENSION)
1 EA	FURNISH AND INSTALL 27 FT. MAST ARM POLE AND 70 FT. MAST ARM
4 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
1 EA	FURNISH AND INSTALL VIDEO INTERFACE EQUIPMENT
60 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
20 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
220 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - SLOTTED
820 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - TRENCHED
220 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID ELECTRICAL PVC CONDUIT - BORED
18 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
35 LF	FURNISH AND INSTALL WOOD SIGN SUPPORTS (4 IN. X 6 IN.)
220 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
1 EA	FURNISH AND INSTALL METERED SERVICE PEDESTAL
70 LF	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 A.W.G.)
9 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
1300 LF	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE - UNDERGROUND
7 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
100 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)
1925 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)
1 EA	FURNISH AND INSTALL BASE MOUNTED CABINET AND CONTROLLER
1 EA	FURNISH AND INSTALL D3-2 DUAL FACE SIGN (VAR. X 16") - MAST ARM MOUNT
2 EA	FURNISH AND INSTALL M95-1/D3-2 SIGN (72" X 40") - MAST ARM MOUNT
2 EA	FURNISH AND INSTALL W3-3 SIGN (36" X 36") WITH "NEW" PANEL (30" X 30") - GROUND MOUNT
3 EA	FURNISH AND INSTALL STANDARD SIDEWALK RAMP WITH DETECTABLE WARNING SURFACE
1 EA	FURNISH AND INSTALL FOUR-CHANNEL TIME DELAY OUTPUT LOOP DETECTOR AMPLIFIER
1 EA	FURNISH AND INSTALL MICRO-LOOP PROBE WITH 500 FT. LEAD-IN
1 EA	FURNISH AND INSTALL MICRO-LOOP PROBE WITH 1000 FT. LEAD-IN
15 LF	FURNISH AND INSTALL 1 IN. LIQUID-TIGHT NON-METALLIC CONDUIT-DETECTOR SLEEVE
100 LF	FURNISH AND INSTALL SAWCUT
100 LF	REMOVE EXISTING PAVEMENT MARKING

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7662 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 6 ARE AS FOLLOWS:

MR. GEORGE SMALL ASSISTANT DISTRICT ENGINEER - TRAFFIC (301) 729-8444	MR. GEORGE FRANKENBURY ASSISTANT DISTRICT ENGINEER - MAINTENANCE (301) 729-8457
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MR. LARRY HUMBERTSON  
ASSISTANT DISTRICT ENGINEER - UTILITIES  
(301) 729-8439

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

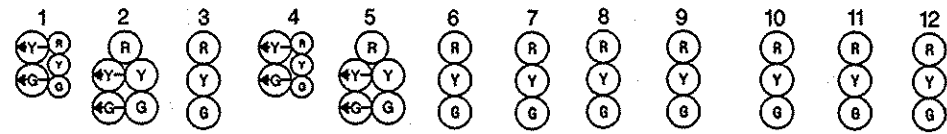
MR. RICHARD DAFF, SR. CHIEF, TRAFFIC OPERATIONS (410) 787-7630	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS (410) 787-7676
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MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF,  
TRAFFIC OPERATIONS  
(410) 787-7631

MS. DARLENE EIDE  
SUPPLY OFFICE  
SIGNAL SHOP WAREHOUSE  
(410) 787-7668

MR. ED RODENHIZER  
TEAM LEADER SIGNAL OPERATIONS  
(410) 787-7652

PHASE CHART



PHASE 1 & 5	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
1 & 5 CHANGE	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
PHASE 1 & 6	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
1 & 6 CHANGE	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
PHASE 2 & 5	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
2 & 5 CHANGE	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
PHASE 2 & 6	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
2 & 6 CHANGE	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
PHASE 4 & 8	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
4 & 8 CHANGE	R	G	Y	R	G	Y	R	G	Y	R	G	Y	R	G	Y
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY

1 REDLINE REVISION

RELOCATE CONTROLLER  
TO SOUTHEAST CORNER  
5-10-08  
TEAM LEADER

**T**RAFFIC **C**ONCEPTS, INC.  
325 Gambrills Road  
Suite E  
Gambrills, MD 21054  
(410) 923-7101  
FAX (410) 923-6473  
EMAIL TRAFFIC.CONCEPTS@COMCAST.NET

**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION PLAN  
US 11 AND NORTH POINTE DRIVE  
HAGERSTOWN, MARYLAND

SCALE	NONE	DATE	11-10-08	CONTRACT NO.	BW996M82
DESIGNED BY	T. ZAYDEL	COUNTY	WASHINGTON		
DRAWN BY	T. ZAYDEL	LOGMILE	2101010.07		
CHECKED BY	K. SCHMID	T.J.M.S. NO.	1070		
F.A.P. NO.	NA	TOD NO.			
DRAWING NO.	TS-260G GI	SHEET NO.	4	OF	4